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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,347	07/09/2003	Anssi Liuhto	60279.00057	8710

32294 7590 08/22/2005

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EXAMINER

NGUYEN, THANH T

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/615,347

Applicant(s)

LIUHTO ET AL.

Examiner

Tammy T. Nguyen

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |



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Detailed Office Action

1. This action is in response to the amendment filed on June 8, 2005.
2. Claims **1-15** are pending.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Bhatia et al.
(USPN 6,118,768 – Date of Patent: September 12, 2000, herein referred to as “Bhatia”).
5. As to claim 1, Bhatia teaches the invention as claimed, including system for transmitting internal messages in a local network while maintaining message synchronism, comprising: multiple sending computer units (CPUs), each for running at least one sending application process for sending an internal message, said message being sent to

two or more recipients (user 7-10 of fig.2C) (see col.11, lines 1-58, and col.12, line 65 to col.13, line 63), and multiple receiving computer units (CPUr), each for running at least one receiving application process for receiving a sent internal message, at least two copies of each receiving application process residing in said receiving computer units (fig.2C) (see col.11, lines 1-58), characterized in, that the system further comprises: one interface unit (IF) per one or more computer units for buffering and relaying messages sent to and from the corresponding computer units (it is inherent because every device network has to have Interface Unit), multiple external links (SrL), each for linking a computer unit to its corresponding interface unit (links from 10g-10j connect to Lan 300 of fig.2C) (see col.26, lines 49-65), and an internal interconnecting device (IxD) for receiving messages relayed by the interface units corresponding to the sending computer units, and for forwarding each received message to the interface units corresponding to the respective receiving computer units one received message at a time, said interconnecting device internally coupled with the interface units (Ethernet Hub 340 of fig.1) (see col.16, lines 8-25).

6. As to claim 2, Bhatia teaches the invention as claimed, characterized in that each interface unit further comprises: a transmitting buffer (TX) for storing one or more message to be sent until processed by the interconnecting device, and a receiving buffer (RX) for storing one or more received messages until processed by the corresponding computer unit (see col.27, lines 27-62).
7. As to claim 3, Bhatia teaches the invention as claimed, characterized in that messages are sent as multicasts by the sending application process (see col.36, lines 6-38).

8. As to claim 4, Bhatia teaches the invention as claimed, characterized in that messages sent and received by application processes running in the same computer unit are routed via the interconnecting device (router 305 of fig.1).
9. As to claim 5, Bhatia teaches the invention as claimed, characterized in that the interconnecting device is an internal bus (Bus 390 of fig.3) (see col.15, lines 25-63).
10. As to claim 6, Bhatia teaches the invention as claimed, characterized in that the interconnecting device is a crossbar (it is inherent because when have switch in the network the switch should be switched in so many different cross ways).
11. As to claim 7, Bhatia teaches the invention as claimed, characterized in that the interconnecting device and the interface units coupled to it are implemented as a modified LAN switch (see col.17, lines 20-39).
12. As to claim 8, Bhatia teaches the invention as claimed, including system for transmitting internal messages in a local network while maintaining message synchronism, comprising: multiple sending computer units (CPUs), each for running at least one sending application process for sending an internal message, said message being sent to two or more recipients (user 7-10 of fig.2C) (see col.11, lines 1-58, and col.12, line 65 to col.13, line 63), and multiple receiving computer units (CPUr), each for running at least one receiving application process for receiving a sent internal message, at least two copies of each receiving application process residing in said receiving computer units (fig.2C) (see col.11, lines 1-58), characterized in, that the system further comprises: one interface unit (IF) per one or more computer units for buffering and relaying messages sent to and from the corresponding computer units (it is inherent because every device

network has to have Interface Unit), multiple external links (SrL), each for linking a computer unit to its corresponding interface unit (links from 10g-10j connect to Lan 300 of fig. 2C) (see col. 26, lines 49-65), and an internal interconnecting device (IxD) for receiving messages relayed by the interface units corresponding to the sending computer units, and for forwarding each received message to the interface units corresponding to the respective receiving computer units one received message at a time, said interconnecting device internally coupled with the interface units (Ethernet Hub 340 of fig. 1) (see col. 16, lines 8-25).

13. As to claim 9, Bhatia teaches the invention as claimed, characterized in that each interface unit further comprises: a transmitting buffer (TX) for storing one or more message to be sent until processed by the interconnecting device, and a receiving buffer (RX) for storing one or more received messages until processed by the corresponding computer unit (see col. 27, lines 27-62).
14. As to claim 10, Bhatia teaches the invention as claimed, characterized in that messages are sent as multicasts by the sending application process (see col. 36, lines 6-38).
15. As to claim 11, Bhatia teaches the invention as claimed, characterized in that messages sent and received by application processes running in the same computer unit are routed via the interconnecting device (router 305 of fig. 1).
16. As to claim 12, Bhatia teaches the invention as claimed, characterized in that the interconnecting device is a crossbar (it is inherent because when have switch in the network the switch should be switched in so many different cross ways).

17. As to claim 13 Bhatia teaches the invention as claimed, characterized in that the interconnecting device is an internal bus (Bus 390 of fig.3) (see col.15, lines 25-63).
18. As to claim 14, Bhatia teaches the invention as claimed, characterized in that the interconnecting device and the interface units coupled to it are implemented as a modified LAN switch (see col.17, lines 20-39).
19. As to claim 15, Bhatia teaches the invention as claimed, characterized in that a multiplexer unit is connected to an interface unit via another multiplexer unit (col.20, line 51 to col.21, line 5).

Response to Arguments

20. Applicant's arguments filed on March 14, 2003 have been fully considered, however they are not persuasive because of the following reasons:
21. Applicants argue that Bhatia does not teach multiple external links for linking a computer unit to its corresponding interface unit. In response to Applicant's argument, the Patent Office maintain the rejection because Bhatia teaches multiple external links for linking a computer unit to its corresponding interface unit as shown in col.26, lines 49-65. Bhatia clearly shows multiple external links for linking a computer unit.
22. Applicants argue that Bhatia does not teach internal interconnecting device for receiving messages relayed by the interface units corresponding to the sending computer units, and for forwarding each received message to the interface units corresponding to the respective receiving computer units one received message at a time. In response to

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Applicant's argument, the Patent Office maintain the rejection because Bhatia teaches internal interconnecting device for receiving messages relayed by the interface units corresponding to the sending computer units, and for forwarding each received message to the interface units corresponding to the respective receiving computer units one received message at a time as shown in col.16, lines 8-25. Bhatia clearly shows internal interconnecting device for receiving messages relayed by the interface units corresponding to the sending computer units, and for forwarding each received message to the interface units corresponding to the respective receiving computer units one received message at a time.

23. Therefore, the Examiner asserts that cited prior arts teach or suggest the subject matter broadly recited in independent claims 1, and 8. Claims 2-7, and 9-15 are also rejected at least by the virtue of their dependency on independent claims and by other reasons set forth in the previous office action.

24. Accordingly, claims 1-15 are respectfully rejected.

Conclusion

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

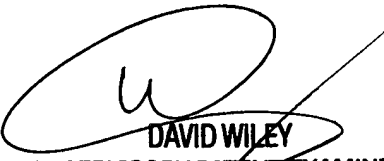
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

26. Any inquiries concerning this communication or earlier communications from the examiner should be directed to **Tammy T. Nguyen** who may be reached via telephone at **(571) 272-3929**. The examiner can normally be reached Monday through Friday between 8:00 a.m. and 5:00 p.m. eastern standard time.

If you need to send the Examiner, a facsimile transmission regarding this instant application, please send it to **(703) 872-9306**. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, David Wiley, may be reached at **(571) 272-3923**.

TTN
August 10, 2005


DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100